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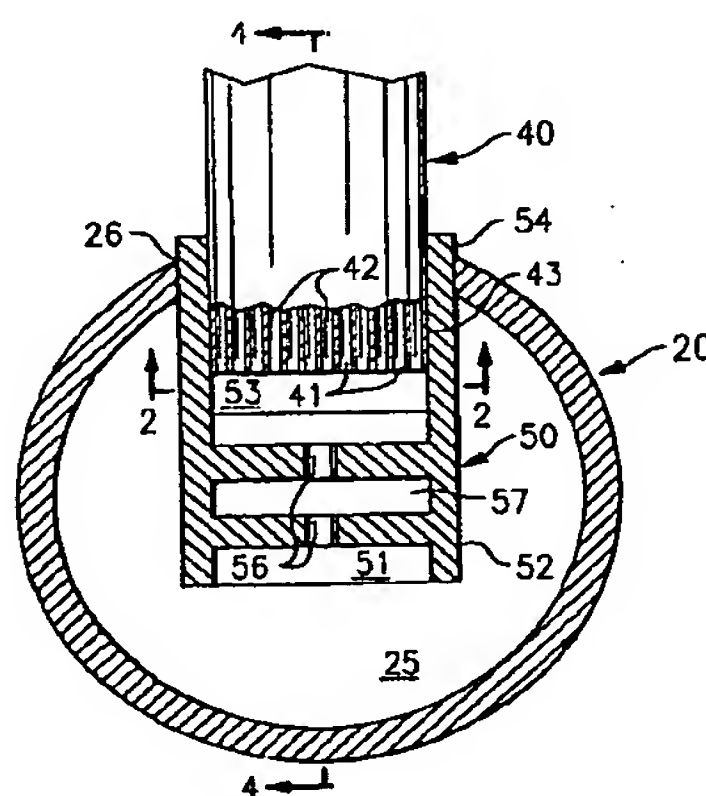
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(54) Title: **HEAT EXCHANGER WITH MULTIPLE STAGE FLUID EXPANSION IN HEADER**



(57) Abstract: A heat exchanger includes a plurality of flat, multi-channel heat exchange tubes extending between spaced headers. Each heat exchange tube has an inlet end in fluid flow communication with one of the headers and an outlet opening to the other header. Each heat exchange tube has a plurality of flow channels extending longitudinally in parallel relationship from its inlet end to its outlet end. A plurality of connectors are positioned between the inlet header and the heat transfer tubes to define a flow path providing fluid flow communication between the inlet header and the inlet ends of the heat exchange tubes. Two or more flow restriction ports are arranged in the series in the flow path through each connector whereby fluid flowing from the inlet header to the flow channels of the heat exchange tube associated therewith undergoes an expansion as the fluid passes through each flow restriction port.

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